

# Exercise in Pregnancy

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# A History

- 1949: Housework and swimming
- 1985: Maximum HR, No >15 min
- 2008: Min 150 min/wk

“Pregnancy should not be looked at as a state of confinement. In fact, it is an ideal time for lifestyle modification. That is because more than any other time in her life, a pregnant woman has the most available access to medical care and supervision.”

-Dr. Raul Artal

Chairmen of OB/GYN at St. Louis University

# ACOG: Benefits of Exercise

<https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Physical-Activity-and-Exercise-During-Pregnancy-and-the-Postpartum-Period>

- Decreased GDM
- Decreased Cesarean and operative vaginal delivery
- Decreased post-partum recovery time
- Prevention of pre-eclampsia
- Modest decrease in overall weight gain in normal weight, overweight, and obese woman

# ACSM: Benefits of Exercise

[http://journalslww.com/acsm-healthfitness/Fulltext/2016/03000/Pregnancy\\_and\\_Exercise\\_Guidelines\\_Fifty\\_Years4.aspx](http://journalslww.com/acsm-healthfitness/Fulltext/2016/03000/Pregnancy_and_Exercise_Guidelines_Fifty_Years4.aspx)

- Prevention of GDM, especially in patients with BMI >33
- Decrease risk of pre-eclampsia
- Babies with normal birth weight
- Prevention of excess maternal weight gain
- Improvement of woman's ability to cope with labor
- Improvement of sx related to post-partum depression
- Quicker return to pre-pregnancy weight post-partum

# ACOG

## **Box 1. Absolute Contraindications to Aerobic Exercise During Pregnancy** ↩

- Hemodynamically significant heart disease
- Restrictive lung disease
- Incompetent cervix or cerclage
- Multiple gestation at risk of premature labor
- Persistent second- or third-trimester bleeding
- Placenta previa after 26 weeks of gestation
- Premature labor during the current pregnancy
- Ruptured membranes
- Preeclampsia or pregnancy-induced hypertension
- Severe anemia

# ACOG: Exercise Recommendations

<https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Physical-Activity-and-Exercise-During-Pregnancy-and-the-Postpartum-Period>

- Physical activity in pregnancy has minimal risks and has been shown to benefit most women, although some modification to exercise routines may be necessary because of normal anatomic and physiologic changes and fetal requirements.

# ACOG: Exercise Recommendations

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- A thorough clinical evaluation should be conducted before recommending an exercise program to ensure that a patient does not have a medical reason to avoid exercise.



# ACOG: Exercise Recommendations

<https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Physical-Activity-and-Exercise-During-Pregnancy-and-the-Postpartum-Period>

- Women with uncomplicated pregnancies should be encouraged to engage in aerobic and strength-conditioning exercises before, during, and after pregnancy.

# ACOG: Exercise Recommendations

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- Obstetrician–gynecologists and other obstetric care providers should carefully evaluate women with medical or obstetric complications before making recommendations on physical activity participation during pregnancy. Although frequently prescribed, bed rest is only rarely indicated and, in most cases, allowing ambulation should be considered.

# ACOG: Exercise Recommendations

<https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Physical-Activity-and-Exercise-During-Pregnancy-and-the-Postpartum-Period>

- Regular physical activity during pregnancy improves or maintains physical fitness, helps with weight management, reduces the risk of gestational diabetes in obese women, and enhances psychologic well-being.

# ACOG: Exercise Recommendations

<https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Physical-Activity-and-Exercise-During-Pregnancy-and-the-Postpartum-Period>

- Additional research is needed to study the effects of exercise on pregnancy-specific outcomes, and to clarify the most effective behavioral counseling methods and the optimal intensity and frequency of exercise. Similar work is needed to create an improved evidence base concerning the effects of occupational physical activity on maternal–fetal health.

# ACSM: Exercise Recommendations

[http://journals.lww.com/acsm-healthfitness/Fulltext/2016/03000/Pregnancy\\_and\\_Exercise\\_Guidelines\\_Fifty\\_Years.4.aspx](http://journals.lww.com/acsm-healthfitness/Fulltext/2016/03000/Pregnancy_and_Exercise_Guidelines_Fifty_Years.4.aspx)

Sedentary women can initiate physical activity

Previously active women can stay active

No upper limits for intensity

Adjust activity type as needed

Modify resistance training workouts

Avoid supine position after first trimester

Watch the altitude

Stay hydrated

# AAFP: Exercise Recommendations

<http://www.aafp.org/afp/2014/0201/p199.html>

At least 30 minutes of moderate exercise on most days of the week is a reasonable activity level for most pregnant women

# ACOG

## Box 3. Examples of Safe and Unsafe Physical Activities During Pregnancy\* ←

The following activities are safe to initiate or continue\*:

- Walking
- Swimming
- Stationary cycling
- Low-impact aerobics
- Yoga, modified<sup>†</sup>
- Pilates, modified
- Running or jogging<sup>‡</sup>
- Racquet sports<sup>§</sup>
- Strength training<sup>‡</sup>

The following activities should be avoided:

- Contact sports (eg, ice hockey, boxing, soccer, and basketball)
- Activities with a high risk of falling (eg, downhill snow skiing, water skiing, surfing, off-road cycling, gymnastics, and horseback riding)
- Scuba diving
- Sky diving
- “Hot yoga” or “hot Pilates”

\*In women with uncomplicated pregnancies in consultation with an obstetric care provider.

<sup>†</sup>Yoga positions that result in decreased venous return and hypotension should be avoided as much as possible.

<sup>‡</sup>In consultation with an obstetric care provider, running or jogging, racquet sports, and strength training may be safe for pregnant women who participated in these activities regularly before pregnancy.

<sup>§</sup>Racquet sports wherein a pregnant woman’s changing balance may affect rapid movements and increase the risk of falling should be avoided as much as possible.

# Motivational Interviewing

[http://ddwhk4orip6i7.cloudfront.net/obesitymi/story\\_html5.html](http://ddwhk4orip6i7.cloudfront.net/obesitymi/story_html5.html)

- Physical activity in pregnancy
  - Current BMI: \_ Expected weight gain in pregnancy\_
  - Motivational counseling: Patient rates herself a \_/10 on willingness to maintain an exercise routine during pregnancy. Pt rates herself a \_/10 on confidence in following through with exercise during pregnancy. Lists pros of exercise in pregnancy as: \_ Lists cons of exercise in pregnancy as: \_
  - Reports self-perceived potential for nutritional improvement as:\_
  - Reports self-perceived potential for increased/maintained physical activity as: \_
  - Reports workplace/personal incentive as: \_
  - Follow up at next appt



# Some final motivation

<http://www.aafp.org/afp/2013/0401/p471.pdf>

